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Winston-Salem Regional Office

July 12, 1994

Mr. Waddell Watters, Hydrogeologist II Winston Salem Regional Office, NCDEHNR 8025 North Point Boulevard, Suite 100 Winston Salem, NC 27106-7005

RE: UNDERGROUND STORAGE TANK CLOSURE, BOWMAN GREY SCHOOL OF MEDICINE, MEDICAL CENTER BOULEVARD, WINSTON-SALEM, NC

INTRODUCTION AND PURPOSE

On June 13, 1994 personnel from Piedmont Environmental, Inc. & Piedmont Environmental Professionals, P.A. visited the captioned site for the purpose of closure-in-place one abandoned 20,000-gallon No. 2 heating fuel underground tank.

This 20,000-gallon tank was placed into service sometime in 1980-81 for fuel to an emergency generator and was removed from service in 1992.

Closure in place was conducted as opposed to removal of the underground storage tank because tank proximity with the building and alley would have made excavation very prohibitive and costly to the owner.

LOCATION AND DESCRIPTION

The site is located in Winston-Salem, Forsyth County, NC, adjacent to a service alley connected to Medical Center Boulevard. The 20,000-gallon tank measured 31 feet long by 10.5 feet in diameter. The tank was in good condition with no visible internal corrosion.

Bowman Grey UST July 12, 1994

LOCATION AND DESCRIPTION (CONT)

Product supply and return lines were 3/4" carbon steel and went immediately beneath the building from the tank (tank is directly adjacent to building). Length of supply and return lines from tank edge to building foundation estimated to be six (6) feet; boring BH-UST 13'-LC was conducted next to these lines with no observed product release.

PROCEDURE

The 20,000-gallon tank was pumped of approximately 7500 gallons of No. 2 fuel to less than one (1") on June 11,1994.

Piedmont Personnel proceeded to perform four (4) 4" sample borings, two (2) feet below bottom of tank. All samples were taken using a solid stem stainless steel bucket auger, decontaminated for each sampling by cleaning with a TSP solution and rinsing with isopropyl alcohol and distilled water. Location of tank and samples as determined by site plan labeled Bowman Grey 20,000 Gallon UST. These samples were collected in laboratory provided new 8-ounce glass jars with teflon lined lids, refrigerated to 4 degrees C. Analysis of soil samples taken on June 13 and 14, 1994, indicate no contaminated soil. Analysis was performed by Par Laboratories, Charlotte, NC utilizing methods 3550 and 5030. The laboratory analysis and chain of custody are enclosed in Appendices.

On July 1, 1994 the 20,000-gallon tank was purged with fresh air and for purposes of cleaning and inspection a confined space entry was performed. The remaining fuel and sludge was pumped into 55 Gallon drums. The tank was squeegeed, wiped dry with rags and deemed clean for filling with granite fines. Additional openings to the tank were made to provide for ease of filling. The tank was filled with granite fines and all openings capped with concrete.

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OBSERVATIONS AND CONCLUSIONS

Infield observations of auger cuttings and collected samples indictated no release of fuel oil.

TPH analysis confirms infield observation. Laboratory findings are as follows:

Location	Depth	Method 5030	Method 3550
BH-UST- RIGHT END	13'	< 10 mg/kg	< 10 mg/kg
BH-UST- LEFT END	18'	< 10 mg/kg	< 10 mg/kg
BH-UST- RIGHT CENTER	R 13'	< 10 mg/kg	< 10 mg/kg
BH-UST- LEFT CENTER	13'	< 10 mg/kg	<10 mg/kg

Respectfully,

Thomas W. Shepler, PE, DEE

Piedmont Environmental Professionals, P.A.

APPENDIX

BOWMEN GREY SCHOOL OF MEDICINE UST CLOSURE DOCUMENTATION

JULY 12, 1994

Existing Building BH-UST BH-UST 13'-RC 13'-LC V CENTER WALK-WAY Alley MEDICAL PIEDMONT <u>ENVIRONMENTALAN</u>C NC BAPTIST HOSPITAL WINSTON-SALEM, NC BOWMAN GAEY 29000 GAL UST PROJECT: 369BH | SCALE: NTS | DATE

PAR LABORATORIES AIC

CHAIN OF CUSTODY

PAR Laboratories, Inc. Phone (704) 588-8333 FAX (704) 588-8335

Shipping 2217 Graham Park Drive Charlotte, NC 28273

Mailing P.O. Box 411483 Charlotte, NC 28241-1483

It is essential that all information be recorded on this Chain of Custody document for acceptance by PAR Laboratories, Inc. and the North Carolina Department of Health and Environmental Control.

Company Name (Billing)			Comments:			
PIEDMON FINING-MENTAL						
Address 2601 M. CAND	0 1					
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City, State & Zip Code Sampled by:	Cr	ک بہ				
Contact Person & Telephone Number	\p					
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Sample Type: DW WW	GW	MW	_ HW Soll	Other		
Samples Maintained @ <4°C Y						
oumpies maintained @ 24 C Y	es <u>5</u>	_ No _	Preserve	d: yes no		
Sample Location & Station Number	С	G	Set Up Date/Time	Collection Date/Time	Analyses Requested	
BH-457-13 RE #1		V	6/19/94		1841	
BH-U8-18 -18 -18 #2		V	414/94		784	-
BH-UST-13'RC#3		V	6/14/94		784	
BH-45T-13 LC #4	ļ	V	614/94		TPH	
]		
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C≃Composite G=Grab DW-Drinking						·

C=Composite G=Grab DW=Drinking water WW=Wastewater GWMW=Groundwater monitoring well HW=Hazardous waste



PAR Laboratories, Inc.

2217 GRAHAM PARK DRIVE P.O. BOX 411483 CHARLOTTE, NC 28241-1483 704/588-8333

June 21, 1994

Reference No: 94 2377

Made For:

Piedmont Environmental

2601 North Cannon Blvd. Kannapolis, NC 28081

Attention:

Kathryn Shepler

Analyses Of:

Soil Samples

Marked:

Sample #1 - BH-UST-13'RE #1 6/13/94 Grab Sample #2 - BH-UST-18'LE #2 6/14/94 Grab Sample #3 - BH-UST-13'RC #3 6/14/94 Grab Sample #4 - BH-UST-13'LC #4 6/14/94 Grab

Received On:

6/16/94; 6/16/94; 6/16/94; 6/16/94

Analyses:

Sample

1

2

3

L

TESTED

(mg/kg)

TPH 3550 TPH 5030 <10 <10 ·· <10 <10 <10 <10 <10 6/20 1200 <10 6/20 1200

Respectfully submitted: PAR Laboratories, Inc.

⊅opin S. Rice

Laboratory Director